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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/253,793	02/22/99	ROBISON	J 4164-P

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EXAMINER

KEASEL, E

ART UNIT

PAPER NUMBER

3754

05

DATE MAILED:

01/31/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/253,793

Applicant(s)

Robison et al.

Examiner

Eric Keasel

Group Art Unit

3754



☒ Responsive to communication(s) filed on 12 Jan 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 13-20 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 13-20 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 3754

## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election without traverse of claims 13-20 in Paper No. 4 is acknowledged.

### ***Claim Objections***

2. Claims 16, 17, and 19 are objected to because of the following informalities:
  - a. Claim 16 should end with a period.
  - b. In claim 17, line 2, it appears that "once" should be --one--.
  - c. In claim 19, line 6, it appears that --and-- should be inserted before "tantalum".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The preamble of claim 13 (and dependent claims 14-20) recites that the claims are directed at a valve plug head retainer. However, the body of the claims include other features (most notably the valve plug head and the valve plug stem) which do not appear to be part of a valve plug head retainer. It is indefinite as to whether the claims are directed at a valve plug head retainer only or to a combination of the valve head plug retainer and the additional positively recited features also.

Claim 13 recites “a means for holding” and “a means for fastening”. Claim 14 recites that the “means for holding further comprises a band”. Claim 15 recites that the “means for fastening further comprises ... a plug head band”. It is unclear as to whether the band is part of the means for holding or the means for fastening or both.

In light of the above informalities, the claims have been examined as could best be understood by the examiner. The examiner's failure to apply prior art to any of the claims should not be construed as an indication of allowable subject matter.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 13-20 (as understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Maier et al. (US Patent Number 4,325,647) in view of Szymaszek et al. (US Patent Number 4,923,173).

Maier et al. disclose a ceramic valve plug head (2), a valve plug stem (3), and a valve head plug retainer (4). The preferred materials for the retainer include aluminum titanate (an aluminum alloy). The retainer is a band that is in contact with the head and the stem.

The retainer of Maier et al. has a first side (engaging the head) greater in height than a second side (its top or bottom). However, applicant may intend that the second side be the side opposite the first side. Maier et al. do not show this. It would have been an obvious matter of design choice to have made the first side greater in height than the second (opposite) side, since applicant has not disclosed that doing so solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the ratio of the heights

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of the sides in any proportion as long as the friction fit between the retainer and the plug is great enough so that the retainer does not slip. In fact, Maier et al. use this friction as their means for fastening.

Maier et al. do not disclose means for fastening as a plurality of nuts and bolts or pins. Szymaszek et al. disclose a similar valve plug head (30), valve plug stem (20), and valve head plug retainer (42). Szymaszek et al. use a plurality a bolts threaded through the retainer and into the plug (obviating the need for nuts). The bolts are considered an equivalent of the pins. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the means for fastening of Szymaszek et al. in the invention of Maier et al. in order to secure the head, stem, and retainer as taught by Szymaszek et al.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Ritland et al. (US Patent Number 5,503,122) disclose similar material selection for valve heads, stems, and retainers.

b. Puster (US Patent Number 3,558,098) discloses a similar head, stem, retainer relationship.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Keasel whose telephone number is (703) 308-6260.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver, can be reached on (703) 308-2582. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3588.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

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January 27, 2000

  
Joseph A. Kaufman  
Primary Examiner

1/27/00